CESAM-PD-F/CESAM-PD-EC **8 March 2000**

MEMORANDUM FOR RECORD

SUBJECT: Minutes from the Northern Gulf Regional Sediment Management Technical Working Group Meeting, December 7-8, 1999

1. A Regional Sediment Management Technical Working Group (TWG) meeting for the northern Gulf of Mexico was hosted by the Mobile District on December 7-8, 1999 at the International Trade Center in Mobile, AL. The agenda and a list of attendees are included in Enclosures 1 and 2 respectively. The purpose of this meeting was to present and discuss the following issues with TWG:

Overview of the Program Management Plan
Status of the sediment budget and ongoing modeling and data collection efforts
RSM data management and GIS initiative
Identification of demonstration area sub-regions
Project initiatives within each sub-region

It should be noted that all presentations from this meeting are available upon request in PowerPoint format.

2. Susan Rees, Mobile District, introduced the meeting on the first day with opening remarks by summarizing the program status and emphasizing the importance of participation from the partnering agencies and associated TWG members. She also discussed the purpose of creating the Program Management Plan and its importance to the program. The RSM Demonstration Program received a million dollars appropriated by Congress from the O&M budget for FY99 activities.

3. An Overview of the Program Management Plan was presented by Larry Parson, Mobile District, and included a review of the philosophy and goals behind the RSM initiative. A top-down approach was presented by first identifying the regional focus characterizing the overall demonstration area in order to evaluate and improve sand management throughout the region. This approach then requires a breakdown of the region into sub-regions based on some geomorphic or coastal processes criteria such as sediment transport patterns over the demonstration area. Each sub-region will address problems associated with the Federal and State projects within each sub-region. Demonstration initiatives will be developed to resolve the problems that interfere with efficient project performance and sand management for each sub-region, which in turn improves the overall performance and management throughout the entire region. This top-down approach will be an iterative process implementing demonstration initiatives based on our current understanding of the projects. Once implemented, monitoring is performed to quantify changes in the project, sub-region, and region, and data are used to evaluate the performance of the demonstration initiative. Results of the evaluation are used to

modify, if necessary, the project, sub-region, and region demonstration initiative. The modifications are then implemented and monitored to evaluate the performance of the modified initiative.

Previous direction from the TWG and CERB has defined the regional focus for the first year of the demonstration program, which includes baselining the demonstration area, identification of historical data for use in the modeling effort, and formulation and refinement of a regional sediment budget and other predictive tools, specific issues pertaining to the various projects (specifically Mobile Entrance), and advanced hurricane recovery procedures. This regional focus will involve the collection and management of enormous amounts of information. Such an effort requires an appropriate information management tool such as GIS.

The RSM Demonstration Area has been divided into 9 sub-regions. The sub-regions of the Florida panhandle (sub-regions 1-7) are based on sub-regions already defined by the Florida DEP. The criteria for their sub-regional boundaries are based on geomorphic and sediment transport characteristics. Two additional sub-regions were added to cover the remaining Alabama coastline. The demonstration initiatives identified within the Sub-Regions can be seen in the presentation material.

4. Post-hurricane recovery programs already exist within the Corps. James Hathorn, Mobile District, presented post-hurricane efforts as a result of Hurricane Georges. Recovery efforts like the one presented at the this meeting can be accelerated by advanced efforts to alleviate some of the legal, policy, and financial constraints that stand in the way of providing advanced hurricane planning. Some of the technical components of this process includes identify suitable sand sources, stockpiling dredged material in strategic places, development of advanced storm response plan, prepare sea grass/dune development specifications, and address beach berm and dune field deficits.

5. The development of a sediment budget over the entire demonstration region has been initiated. The ongoing development of the sediment budget will assist in maintaining a regional focus throughout the demonstration area. Linda Lillycrop, Mobile District, presented the status of this ongoing effort over the region extending from St. Joseph Bay, Florida, to the western end of Dauphin Island, Alabama. The sediment budget was based on data obtained through available sources. The budget revealed there are areas of high, medium, and low confidence in the obtained data, and that many areas are lacking in data. Presently, there is high confidence in the Pensacola Pass, East Pass, and Mexico Beach data, medium confidence in the data for St. Joseph Spit and the area east of Panama City, and low confidence in the Panama City Inlet data. Areas that lack data are Mobile Bay Entrance, Perdido Pass, and areas between the inlets. In depth research to obtain available data for those areas lacking data and those areas with low and medium confidence levels is required and will be a priority for the data collection effort. Those areas with high confidence levels should be reevaluated throughout the sediment budget development process.

6. The regional management approach requires implementing demonstration initiatives based on

our current understanding of the projects. Once implemented, monitoring is performed to quantify changes in the project, sub-region, and region, and data are used to evaluate the performance of the demonstration initiative. Results of the evaluation are used to modify, if necessary, the project, sub-region, and region demonstration initiative. Modifications are then implemented and monitored to evaluate the performance of the modified initiative.

Linda Lillycrop presented the tools that are necessary to carry out this approach and to evaluate the performance of existing conditions, demonstration initiatives, and to develop any necessary modifications to projects, sub-regions, and the overall region. The following primary tools are required:

a) A sediment budget for each project and sub-region as discussed above. The project and sub-region information will be combined to create the regional sediment budget.

b) Hydrodynamic tools for evaluating sediment transport and shoreline change at projects, sub-regions, and at the regional scale.

c) A data management and analysis tool for organizing historic data, new data, and results of data and model analysis. The tool will be necessary for sharing information with demonstration program co-sponsors.

The result of combining the tools will provide for a working Regional Sediment Budget, Calibrated Regional Prediction System, and a Regional Data Management and Geographic Information System. These tools will provide the capability for management of the entire demonstration region and improve our ability for making management decisions.

7. With the tremendous amount of information involved in regional management, the TWG recognizes the need for appropriate GIS data management capabilities. Jeff Lillycrop, Mobile District, Spatial Data Branch, emphasized the need for a RSM GIS initiative. Because the RSM Program is a cooperative effort, there will be a large amount of data to be shared between many agencies to support many tasks. This would require leveraging existing efforts such as FL DEP and other Corps efforts. Such an effort would have to be implemented incrementally, focusing on selected elements such as creation of a base map and the baseline and historical database. As the program progresses to a fully functional GIS that meets the needs of a regional management system, other functions and capabilities can be added. To get this initiative up and running, it was requested that members of the TWG provide information pertaining to other known GIS efforts. Needed information includes:

a) Other current and related GIS efforts ongoing within cooperative agencies
b) Points of contact
c) What GIS applications
d) Type of data and databases

8. Other information that may be pertinent to RSM. The second day of the meeting, Larry Parson

and Linda Lillycrop presented the Demonstration sub-regions, the project initiatives within each sub-region, and obtained feedback on the initiatives from the TWG. Preliminary information can be seen in the flip chart attachments included in Enclosure 3. This information will be included and expanded in the management plan and updated on a regular basis reflecting the iterative process of the management program. Information identified for the sub-region initiatives include:

a) Projects
b) Problem Statement
c) Demonstration Initiative
d) Estimated Performance
e) Monitoring Scheme
f) Issues
g) Supporting Efforts

9. The meeting concluded with a wrap-up and final recommendations from the TWG. One of the primary focuses will be to present the overall status of the Program to the CERB in San Diego this June. The presentation will include an update on the sediment budget as to how the available historical data will improve the confidence level of the model as well as requirements to continue improve in the future. The RSM GIS initiative will also be addressed at the CERB meeting.

Benefit identification was discussed as a program need. The TWG recommended that this begin with local inputs from sub-regional workshops. Involvement of the Institute for Water Resources (IWR) was also recommended to assist the District team in identifying and assessing potential benefits effects associated with the regional management approach. IWR will also assist in developing a framework for analyzing and selecting alternatives consistent with results of the physical modeling and with applicable authorities.

Fast Track Shore Protection Approach was discussed and recommended that this approach be applied at Gulf Shores, Alabama. The intent of such an approach is to speed up the processes associated coastal projects.

The next TWG meeting will be held during the week of April 10-14 to correspond with the Gulf of Mexico Symposium 2000 being held in Mobile. Please reserve a spot on your calendar.

10. A list of the meeting action items and those persons/agencies responsible for carrying out the action item are included below. For those items that you have been deemed responsible, please provide a status of your progress to Linda Lillycrop or Larry Parson by 15 March 2000. Follow-up correspondence on the status of the action items will be provided.

Action Items
1. Involve local interests - Regional Sediment Management road shows/ Sub-region workshops.

POC: SAM/TWG

2. Identification of benefits – Non-mission/non-traditional benefits
POC: IWG & Environmental Lab. Provide information to SAM

3. Gulf of Mexico Symposium 2000 (April 9-11) – Organize special session of regional coastal issues.
POC: Scott Douglass – USA

4. Demonstration Program Management Plan to include program philosophy, tools, implementation requirements, benefits, etc.
POC: SAM & TWG

5. Obtain input from non-Federal organizations on short-term activities, i.e. Perdido Inlet Management Plan, Florida sediment budget, Florida sand search (recon level 100% state)
POC: TWG studies (50% state, 50% local)

6. Cross fertilization meeting between New Jersey effort and NGRSM
POC: Charlie Chesnutt & Joan Pope

7. Data search index – identify sources of historical data for Florida and Alabama
POC: Roxane Dow (FL), Phillip Hinesley (AL), provide information to SAM

8. Include FEMA in NGRSM Program
POC: Susan Rees to call Todd Davidson, Region 4

9. NOS Disaster Assistance Plan
POC: Susan Rees communications with Mary Matta
Phillip Hinesely

10. Linda Lillycrop to participate in the Coastal Engineering Technical Advisory Committee
POC: Paden Woodruff

11. Incorporate embedded quality standards in SBAS
POC: Joan Pope

12. Identify others tools that can be used by the RSM program
POC: TWG provide information to Linda Lillycrop

13. Identify other GIS activities
POC: TWG provide information to Jeff Lillycrop

14. Develop strategy to involve other agencies – regional and national level.
POC: Charlie Chesnutt/Susan Rees

15. Identify all non-Federal projects within each sub-region
POC: TWG

16. Take measures to separate valid solutions from "fuzzy" solutions. Avoid paying for ineffective solutions, insure that monitoring is done, and evaluate effectiveness or impact outside immediate areas.
POC: TWG

17. Correspondence with Eglin AFB
POC: Susan Rees get with Colonel Norwood/Gen. Capka

18. Need detailed sediment budget for inlets – can then combine into regional scheme
POC: Linda Lillycrop

19. Contact and meet with USGS, St. Petersburg Coastal Office. SAM visit and brief
POC: Charlie Chesnutt/Susan Rees

20. Make sure that the Panama City Beach monitoring complies with USACE requirements. How do we look at impact of borrow sites
POC: Greg Miller

21. Storm impact assessments need to be region-wide
POC: TWG

22. Bay County proposal to open East Pass to St. Andrew
POC: Henry Malec, Tyndall

23. Add critically eroding areas region-wide
POC: Paden Woodruff provide information to Larry Parson and Linda Lillycrop

24. Obtain Taylor engineering study of Walton County
POC: Larry Parson and Linda Lillycrop

25. Add Alabama critical eroding areas
POC: Scott Douglass

26. Brief Alabama Coastal Erosion Task Force
POC: Phillip Hinesley

27. Fast Track Shore Protection Approach for Gulfshores, AL.
POC: Charlie Chesnutt/Roger Burke

REGIONAL SEDIMENT MANAGEMENT DEMONSTRATION PROGRAM

Technical Working Group Meeting Agenda

December 7-8, 1999
Mobile, Alabama

December 7 – International Trade Center
Killian Room, 1st Floor

Time	**Topic**	**Speaker**
1300 – 1315	Welcome and Introductions	Rees
1315 – 1330	Program Status	
1330 – 1400	Overview:	
	Program Management Plan	Parson
	Regional Focus	
1400 – 1420	Historical Data	Parson
1420 – 1440	Demonstration Area Baseline	Parson
1440 – 1500	Post-Hurricane Recovery	Langan/ Hathorn
1500 – 1520	Break	
1520 – 1540	Sediment Budget	L. Lillycrop
1540 – 1600	Analysis & Predictive Tools	L. Lillycrop
1600 – 1620	Data Management & GIS	J. Lillycrop
1625 – 1700	Discussion	TWG

Enclosure 1

REGIONAL SEDIMENT MANAGEMENT

DEMONSTRATION PROGRAM

Technical Working Group Meeting Agenda

December 7-8, 1999
Mobile, Alabama

December 8 – International Trade Center
Killian Room, 1st Floor

Time	**Topic**	**Speaker**
	Sub-Regions and Project Initiatives	
0800 – 0830	Sub-Region 9 Mobile Bay/Dauphin Island	L. Lillycrop
0830 – 0900	Sub-Region 8 Perdido Pass	Parson
0900 – 0930	Sub-Region 7 Pensacola Pass East Pass Sub-Region 6	L. Lillycrop
0930 – 0945	Break	
0945 – 1015	Sub-Region 5 St. Andrew Bay Entrance Panama City Beaches	Parson
1015 – 1030	Sub-Region 4 Sub-Region 3 Sub-Region 2 Apalachicola River Sub-Region 1	L. Lillycrop
1030 – 1100	General Discussion and Wrap Up Action Items Next Meeting	Rees

Regional Sediment Management Technical Working Group Meeting
December 7 &8, 1999

List of Attendees

Name	Affiliation	Telephone/Fax	Email
Larry Parson	USACE, Mobile	(334) 690-3139/690-2727	larry.e.parson@sam.usace.army.mil
Andrew Morang	USACE, WES/CHL	(601) 6342064/634-3080	a.morang@cerc.wes.army.mil
Scott Douglass	Univ. of South Alabama	(334) 460-7437/461-1400	sdouglas@jaguar1.usouthal.edu
Joan Pope	USACE, WES/CHL	(601) 634-3034/634-3080	j.pope@cerc.wes.army.mil
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Roxane Dow	Florida DEP	(850) 487-4469 ext 194	roxane.dow@dep.state.fl.us
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Linda Lillycrop	USACE, Mobile	(334) 690-2593	linda.s.lillycrop@sam.usace.army.mil
Bruce Carlson	USACE, IWR	(703) 428-9089	bruce.d.carlson@wro01.usace.army.mil
Phillip Hinesley	ADECA Coastal Programs	(334) 626-0042	phillip.hinesley@czm.noaa.gov
Riley Hoggard	National Park Service	(850) 934-2617	riley_hoggard@nps.gov
Henry Malec	Tyndall AFB	(850) 283-2398	henry.malec@tyndall.af.mil
James Hathorn, Jr.	USACE, Mobile	(334) 690-2735	james.e.hathorn@sam.usace.army.mil
Charley Chesnutt	HQ USACE	(202) 761-1853	charles.b.chesnutt@usace.army.mil

Enclosure 2

NOTES TRANSCRIBED FROM FLIP CHARTS

Products

1. Need to add project specific activities
2. Include broader range of benefits
3. New technologies
4. Tools to accomplish the new management philosophy

Management within the littoral system. Sand source irrelevant, can get from management anywhere. Even though this may not be an issue here, it is in other areas of U.S.

Data search needs to be essentially complete in 2-3 months, can always add more later.

- Provide list to TWG
- Needs to include all data used in sediment budget
- Needs to include dredging/disposal information
- FEMA sand inputs
- Other engineered activities
- Include list of other studies/publications at least over last 10 years.

Add other agencies for environmental information

Port St. Joe – sub-region 3 not sub-region 1
Add Sykes cut to sub-region

Sub-Region Discussion

Sub-Region 9

- Add Section 103 Study to support efforts
- Add FEMA berm
- Move within bay activities from initiatives to supportive efforts
- Need to include wave information for correlation in monitoring SIBUA (WIS hindcast/NDBC gauge data)
- Government Cut / Pass Drury

Issue – Monitoring more costly due to inability of SHOALS to work in this area.
Problem – beneficial use versus shore protection project (need full explanation in plan)

Sub-Region 8
Other supporting efforts

- Gulf Shore permit – East Beach

Enclosure 3

- Perdido Key Beaches – restudy

- Little Lagoon/DOT

Nourishment design/placement disposal

Problem – Replace DI with Orange Beach/Gulf shores

- Need baseline bathymetry

Sub-Region 6 &7

- No Federal Projects in 6
- Include critically eroding shoreline areas as potential supportive efforts
- littoral zone versus direct beach placement
- Must correspond with Eglin
- May need Jetty sand tightening

Supportive Efforts

- Pensacola Harbor & US Navy DMMP Initial appraisal
- GIWW – Ft. McRae
- FEMA Berms
- Pensacola Inlet Management Plan

Monitoring to include not just surveying but bringing everything together.

Sub-Region 5

- Need to communicate with FDEP B&CS as well as park manager

Supportive Efforts

- St. Andrews Inlet Management plan
  . Coastal Tech
- Section 111 / St. Andrew Park
- Permit monitoring - needs to comply with USACE requirements
- Concern with the location of borrow sites (mine toe of beach)

Evaluate performance of PCB – demo initiative

Add East Pass project – concern that pass will close immediately – possible 206/Coastal America

Sub-Regions 4,3,2,1

- Add Sykes Cut / St. George Island Channel
- Mexico Beach
- Possibly State projects

Wrap Up / Discussion

1. CERB
   a. Presentation in Spring:
      - slide showing gain/loss uncertainty. Present same slide updated to show changes based on historical data
      - Make red lines bolder, add dates, add legend
      - Put sub-regions into slide

b. What do we need to do to remove more red after May 2000
(i.e. USAF, Eglin problem)

2. Need to start benefit identification with local inputs from sub-regional workshops.

3. Try “Fast Track Shore Protection Approach” at Gulf Shores. Need to get Charlie Chesnutt and Roger Burke together.